

Total Maximum Daily Load Progress Report

Regional Water Board	Central Coast, Region 3
Beneficial uses affected	REC-1, REC-2
Pollutant(s) addressed:	Fecal Coliform
Implemented through:	Regulatory and non-regulatory Action
Approval date:	November 20, 2006

TMDL summary:

Watsonville Slough is on the 2010 Clean Water Act section 303(d) list of impaired waters for pathogens. Fecal coliform bacteria levels exceed Basin Plan objectives for the protection of water contact recreation (REC-1) and non-contact water recreation (REC-2). Urban stormwater and agriculture were identified as the primary sources of pathogens. The Central Coast Regional Water Quality Control Board developed a [TMDL for pathogens](#) that was approved by the Office of Administrative Law in November 2006.

The TMDL established an implementation plan, primarily through the use of National Pollutant Discharge Elimination System (NPDES) permits, Waste Discharge Requirements (WDRs), and a basin plan prohibition (Watsonville Slough Livestock Waste Discharge Prohibition). The TMDL implementation schedule calls for achieving pathogen levels in the Watsonville Sloughs by 2016.

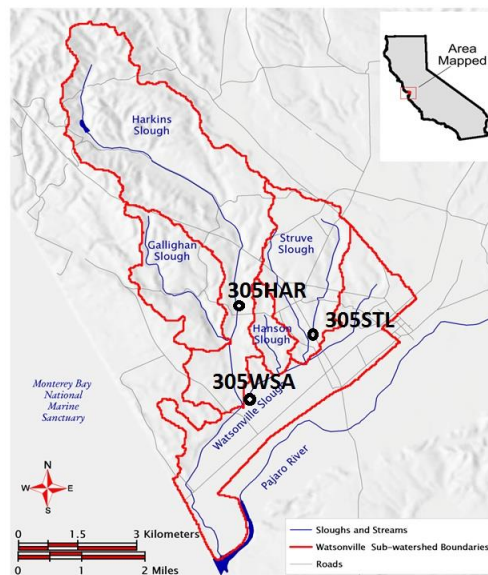
Watsonville Slough Pathogens TMDL

STATUS

- ☐ Conditions Improving
- ☒ **Data Inconclusive**
- ☐ Improvement Needed
- ☐ TMDL Achieved/Waterbody Delisted

Watsonville Slough and Sub-watersheds

(Source: Hagar, et al., 2004)



TMDL Waste Load Allocations/Load Allocations

WASTE LOAD ALLOCATIONS	Receiving Water Fecal Coliform (MPN/100mL) ¹
Santa Cruz County, City of Watsonville, Santa Cruz Co. Freedom Sanitation District, City of Watsonville	≤200
LOAD ALLOCATIONS	
Operators or owners of irrigated lands who land-apply non-sterile manure and/or operators and owners of livestock facilities and animals	≤200

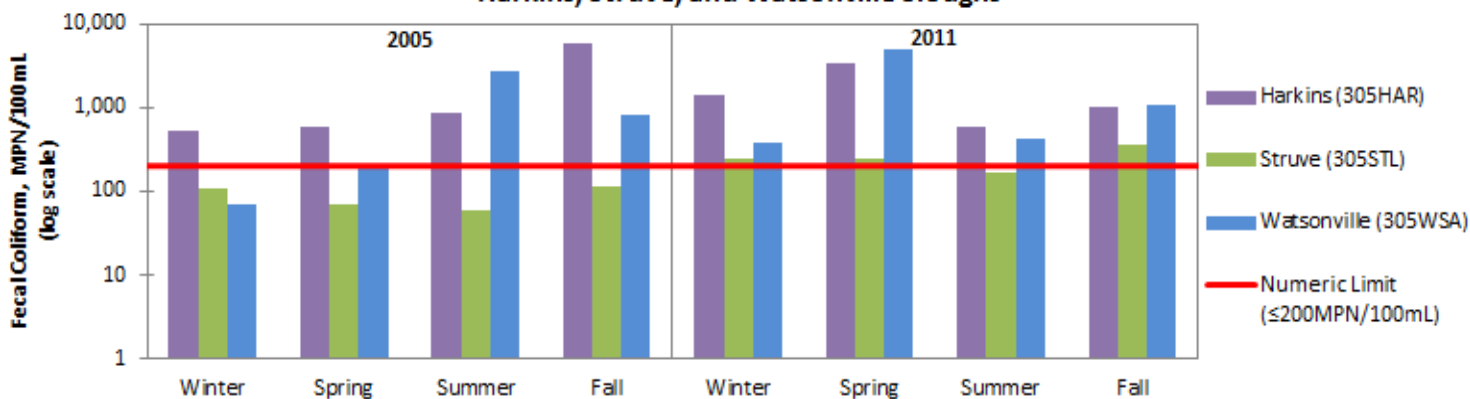
¹ As geometric mean (geomean) of five (5) samples taken in a 30-day period, nor shall more than ten percent of total samples collected during any 30-day period exceed 400 MPN per 100mL.

Water Quality Outcomes

- Available water quality data implies that Watsonville Slough conditions have not improved over a period of 8 years.
- Water quality data suggest urban areas (305STL) have lower fecal coliform levels than agriculture areas (305WSA, 305HAR).
- Water quality data show no evidence to suggest that the TMDL target will be achieved by 2016.
- More regulatory effort is required to implement the TMDL implementation plan.

Water Quality

2005/2011 Fecal Coliform Seasonal Geomean Harkins, Struve, and Watsonville Sloughs



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1. Provide location by Hydrologic Unit(s) (HUC) to a HUC 12 level.

- HUC 12 : 180600020805

2. List of the Major Stakeholder Groups (e.g., Ag, Stormwater, etc.) include SWRCB and RWQCB programs.

Santa Cruz County, Resources Conservation District of Santa Cruz County, City of Watsonville, Land Trust of Santa Cruz County, The Nature Conservancy, State Coastal Conservancy, Pajaro Valley Water Management Agency, Ecology Action, Watsonville Wetlands Watch, Pajaro Valley Unified School District, U.S. Fish and Wildlife Service, DFG, RWQCB programs ag, stormwater, and nonpoint source

3. Have any implementation actions been taken? Yes

a. What were those actions?

Wetland restoration and land acquisition

b. By whom were these actions taken (Waterboard and/or Discharger(s))? (e.g., Develop/Update Waiver, permits, Mgt. Measures/Practices implemented, Monitoring Plans developed, etc.)

- Santa Cruz County -2003, the County of Santa Cruz developed a Watsonville watershed plan
- Resources Conservation District of Santa Cruz County - middle Watsonville Sloughs Drainage Improvement and Enhancement Project through the Integrated Watershed Restoration Program (IWRP).
- Land Trust of Santa Cruz County - Acquisition of four parcels (486 acres) in the Watsonville Slough area of southern Santa Cruz County for the protection and restoration of natural resources, and for public access consistent with those purposes.
- DFG - Fish and Game Restoration Plan
- Watsonville Wetlands Watch – restoring and improving degraded wetland and upland habitat along West Branch Struve Slough in Watsonville, California.
- Pajaro Valley Unified School District/ Watsonville Wetlands Watch – Restoration of the 80 acres of Environmentally Sensitive Habitat Areas (ESHAs) which surround Pajaro Valley High School.

4. What were the results of the implementation actions described in question # 3?

- Acquired property
- Agriculture lands taken out of production and returned to wetland habitat
- Improved wetland function

5. Has the State devoted any resources to these actions?

- Staff Resources (PYs) Yes
- Funding Resources:
 - CWA 319(h) Grant project funds? Yes
 - Prop. 84, 50, 40, 13, etc. funds? Yes
 - State Revolving Fund? No
 - Other? 40101

6. Have the Dischargers devoted any resources to these actions? (Briefly describe sources of funds).

- City of Watsonville – funds for wetland restoration and stormwater program
- County of Santa Cruz – funds for wetland restoration planning and stormwater program

7. What are the next steps based upon results described in question # 4?

Continue to implement Water Board stormwater, agriculture, and nonpoint source programs. Continue to support local agency restoration efforts.

